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## **CLAIMS**

What is claimed is:

1. A method enabling a merchant to establish a merchant account for processing credit-card transactions whereby the merchant may begin processing transactions upon submitting an on-line merchant account application, the method comprising the steps of:

providing from a merchant to an application processing entity an indication that the merchant wishes to establish a merchant account;

transmitting over the Internet from the application processing entity to the merchant a merchant account application requesting data for establishing a merchant account;

transmitting over the Internet from the merchant to the application processing entity the data for establishing a merchant account;

at the application processing entity, creating an account associated with the merchant;

at the application processing entity selecting and assigning a merchant identification number (MID), terminal identification number (TID), and gateway identification number (GID) to the merchant account; and

at the application processing entity transmitting the selected MID, TID, and GID to the merchant.

2. The method of claim 1 in which the application processing entity is an independent sales organization (ISO).

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- 3. The method of claim 1 in which the application processing entity is an acquirer bank (ACQ).
- 4. The method of claim 1 further comprising maintaining a database of available active MIDs that may be used to uniquely identify a merchant, TIDs that may be used to uniquely identify a particular location from which the merchant will be processing credit card transactions, and GIDs that uniquely identify various network gateways through which credit card transactions may be routed through a computer network to a transaction processing center; and

selecting and assigning a MID, TID and GID to the merchant account from said plurality of available active MIDS, TIDs and GIDs stored in said database.

- 5. The method of claim 4 in which particular MIDs, TIDs and GIDs are associated in shell accounts and one of the shell accounts is chosen by the application processing entity and assigned to the merchant.
- 6. The method of claim 1 in which the MID, TID and GID are selected on a real-time basis.
- 7. The method of claim 1 further comprising the step of updating the processing center to which the GID routes the merchant's transactions with demographic

data supplied by the merchant in completing the merchant account application, so that transactions processed by the merchant may be properly identified.

- The method of claim 7 further comprising the step of updating a credit 8. card back-end settlement network with the merchant's demographic data. 5
  - The method of claim 1 further comprising the step of setting a divert flag 9. to prevent the transfer of funds from an acquiring bank associated with the merchant account to the merchant in settlement of transactions processed by the merchant.
  - The method of claim 9 further comprising the step of underwriting the 10. account to verify the data submitted by the merchant in completing the merchant account application and to determine whether the merchant represents an acceptable risk according to predefined risk criteria.
  - The method of claim 10 further comprising the step of resetting the divert 11. flag upon successful completion of the underwriting step.
- A method allowing an application processing entity to establish an active 12. merchant account for processing credit card transactions whereby an online merchant 20 may begin processing credit card transactions over the Internet upon applying for the merchant account, wherein the application processing entity performs the steps comprising:

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maintaining a pool of available active merchant identification numbers (MIDs), terminal identification numbers (TIDs) and gateway identification numbers (GIDs);

sending an on-line merchant account application to a merchant desiring to establish an account so that the merchant may complete and return the application to the application processing entity on-line;

selecting a MID, TID and GID from the pool of available active MIDs, TIDs and GIDs and creating an account record associating the merchant with the selected MID, TID and GID;

removing the selected MID, TID and GID from the pool of available active MIDs, TIDs and GIDS; and

transmitting the selected MID, TID and GID to the merchant.

- 13. The method of claim 12 further comprising the steps of displaying a banner advertisement on a third-party web site, said banner advertisement including a hypertext link to a web site operated by the application processing entity, whereby a merchant viewing the web site of the third party may access the web site of the application processing entity by executing the hypertext link associated with the banner advertisement.
- 14. The method of claim 13 wherein the hypertext link associated with the banner advertisement includes encoded data identifying the third party so that the application processing entity may record that a merchant executing the link was directed to the application processing entity from the third party's web site.

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15. The method of claim 14 further comprising the steps of:

establishing residual tables identifying the third party as a source of a merchant account established as a result of the merchant executing the link included in the banner advertisement displayed on the third party's web site; and

paying the third party a residual based on the value of credit-card transactions processed by the merchant.

- 16. The method of claim 12 wherein the step of sending an on-line merchant account application to the merchant comprises transmitting an on-line application web page over the Internet.
- 17. The method of claim 12 wherein the step of transmitting the MID, TID and GID to the merchant comprises transmitting a congratulatory web page to the merchant over the Internet, the congratulatory web page including the selected MID, TID and GID.
- 18. The method of claim 12 wherein the step of transmitting the MID, TID and GID to the merchant comprises sending a message including the selected MID, TID and GID to the merchant by Internet e-mail.

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- 19. The method of claim 12 wherein the merchant begins processing credit card transactions substantially immediately upon receiving the selected MID, TID and GID.
- 20. The method of claim 12 further comprising the step of setting a divert flag associated with the merchant account.
- 21. The method of claim 20 further comprising an underwriting step wherein the application processing entity verifies data supplied by the merchant in the completed on-line application and determines whether the merchant represents an acceptable risk based on predefined risk criteria.
- 22. The method of claim 21 further comprising the step of resetting the divert flag when it has been determined that the merchant represents an acceptable risk during the underwriting step.
- 23. The method of claim 13 wherein the third party is an application service provider acting as a merchant host whereby on-line merchants may establish their Internet presence employing the application service provider's facilities.

24. A method of establishing a merchant account whereby a merchant may begin processing credit-card transactions over a computer network upon applying for said merchant account, said computer network being interconnected with a credit card front-

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end processing center and a back-end settlement network via a network gateway, said merchant account comprising a merchant identification number (MID), a terminal identification number (TID), and a gateway identification number (GID), the MID uniquely identifying the merchant, the TID uniquely identifying a particular location or facility from which the merchant is processing credit-card transactions, and the GID uniquely identifying the particular network gateway through which credit card transactions originating from the merchant will be routed to the front-end processing center and the back-end settlement network, the method comprising the steps of:

maintaining a pool of available active MIDs, TIDs and GIDs;
receiving an application for a new merchant account from the merchant;
selecting a MID, TID and GID from said pool of available active MIDs, TIDs and GIDs;

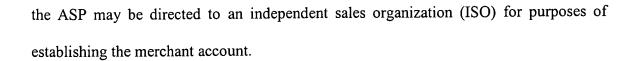
removing said selected MID, TID and GID from said pool of available active MIDs, TIDs and GIDs and writing said selected MID, TID, and GID to a database for issued MIDs, TIDs, and GIDs;

transmitting the selected MID, TID and GID to the merchant;

updating the gateway identified by the GID to recognize and route transactions bearing the merchant's MID and TID; and

updating the front-end processing center and the back-end settlement network to recognize and process transactions bearing the selected MID and TID.

25. The method of claim 21 further comprising the step of establishing a relationship with an application service provider (ASP), whereby merchant customers of



- 26. The method of claim 22 further comprising the step of offering special pricing for establishing a merchant account to merchants directed to the ISO by the ASP.
  - 27. The method of claim 22 further comprising the step of transmitting a merchant account application form to the merchant to be completed by the merchant and returned to the ISO, the application form being co-branded with the names of both the ISO and the ASP.